

**UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS**

VINYL TECHNOLOGIES, INC.,

Plaintiff,

v.

LASER MECHANISMS, INC.,

Defendant.

LASER MECHANISMS, INC.,

Counterclaimant,

v.

VINYL TECHNOLOGIES, INC., a.k.a.

VYTEK,

Counterclaim Defendant,

and

DIRK BURROWES, an individual,

Third-Party Defendant.

Civil Action No. 4:13-cv-40017-TSH

Honorable Judge Hillman

DECLARATION OF MARK J. TAGGART

I, Mark J. Taggart, hereby declare as follows:

I. Background/Laser Mechanisms, Inc.

1. I am president of Laser Mechanisms, Inc. ("Laser Mech"), a position that I

have held since December 2008.

2. I personally have been working in the laser industry for decades. I am a member of the Laser Institute of America and today serve as the Chairman of the National Photonics Initiative (NPI) – Advanced Manufacturing Subcommittee. As recently as last week, I presented a White Paper in Washington, D.C. during a panel discussion at the National Academy of Sciences outlining the group's recommendations on how advanced manufacturing can solve problems, enable innovation, facilitate economic growth and improve our global competitiveness. Also, I am on the Michigan-East District Export Council and a Senior Member of the Society of Manufacturing Engineers.

3. Laser Mech was founded in 1980 by William G. Fredrick, a leading pioneer in the field of industrial laser processing. Having innovated many of the early laser applications, he envisioned a company that would develop the building blocks of laser beam delivery. These systems, including for example articulating arm systems, were to be custom configured into integrated processing solutions. Today, Laser Mech, located in Novi, Michigan, is recognized as a leader in custom laser processing solutions using beam delivery components and articulated arm systems for all facets of industrial applications.

4. Laser Mech's delivery components are used in numerous types of industrial applications including cutting, welding, drilling, scribing, surface treatment, as well as other processes. Laser Mech's delivery systems are used with every type of laser, including CO2, ND:YAG, Fiber Lasers and more. Over the years, Laser Mech has introduced many innovations to enhance the performance, safety, capability, ease of use, as well as the cost effectiveness of laser processing.

II. Advanced Engineering/Exacting Fabrication/Quality Control

5. Utilizing the latest computer hardware and computer-aided design (CAD) software, the engineers at Laser Mech engineer the highest quality beam delivery systems available on the market. Laser Mech maintains an extensive network of manufacturing partners for the fabrication of all beam delivery components, all of whom are continually reevaluated to assure their conformance to Laser Mech's stringent manufacturing standards for precision machining and quality control.

6. By maintaining a high standard for manufacturing precision, all Laser Mech's parts deliver high quality repeatability, durability and reliability. Every beam delivery system Laser Mech builds goes through rigorous testing procedures designed to meet or exceed all Quality Control Certifications.

III. Industrial Lasers/Fiber Lasers

7. The word *laser* started as an acronym for "light amplification by stimulated emission of radiation." The term "light" broadly denotes electromagnetic radiation of any frequency, not only visible light, hence *infrared laser*, *ultraviolet laser*, *X-ray laser*, etc. The carbon dioxide laser (CO₂) was one of the earliest gas lasers to be developed, and it is today considered one of the most useful. Carbon dioxide lasers are the high power continuous wave lasers that operate in the infrared.

8. A Fiber Laser is a laser in which the active gain medium is an optical fiber doped with a rare-earth element. One advantage of Fiber Lasers over other types of lasers is that the light is already coupled into a flexible fiber. This enables the light to be delivered to a movable focusing element. This is particularly important for laser cutting or drilling in which lasers are used to drill holes or cut through very hard materials. The

advantages of Fiber Lasers in industrial applications are immediate and include lower costs to run, high mean time between failure, greater electrical efficiency, the non-use of consumables, and more recently, the ability to automate using robots.

IV. The FiberCut Laser Processing Head

9. In June 2009, Laser Mech introduced a revolutionary new processing head to be used in 3-dimensional robotic cutting. The new processing head was engineered to operate as a low moving mass head so as to minimize inertia transfer to the robot support arm. Utilizing a clean looking and eye catching silver color, the revolutionary new processing head was given the brand name FiberCut.

10. The FiberCut processing head was first introduced at the LASER World of PHOTONICS trade fair in Munich, Germany in June 2009, and subsequently promoted throughout North America, including a North America debut, at the Fabtech show in November 2009 in Chicago, Illinois (receiving some 25,000 visitors), as the best cutting head ever built offering superior performance and outstanding value. See Laser Mech June, July, November and December 2009 and March/April 2010 newsletter/press releases attached hereto as **Ex. 1**. (The Laser Mech newsletter is mass mailed to approximately 9000 customers and other industry participants, as well as various press outlets).

11. Laser Mech's FiberCut laser processing head was specifically designed to handle demanding industrial applications in extremely harsh environments. The first FiberCut laser processing head was a right angle system with all connections to the head, including the fiber, made so as to enter at a right angle providing tight access to parts, easy cable routing and stress reduction on the input fiber. FiberCut RA (Right

Angle) is rugged yet easy to maintain and operate in a factory floor environment. FiberCut RA laser processing heads have also demonstrated considerable success in retrofit situations where they have replaced existing laser cutting heads used by end users that were costly and difficult to operate. See photographs attached hereto as **Ex.**

2. As shown by the photographs, the FiberCut brand was and is prominently displayed on the side of the laser processing head.

12. In June 2010, Laser Mech introduced two new FiberCut laser processing heads to create a family of FiberCut laser processing heads, including the FiberCut Zero Degree and FiberCut Mini. The two newly-designed versions along with the original FiberCut processing head expanded the family to three distinct model types. See Laser Mech May/June 2010 newsletter/press release attached hereto as **Ex. 3.**

13. The FiberCut Zero Degree, also known as the FiberCut ST, is also designed for 3-dimentional robotic cutting with a fiber-coupled laser but instead of being at a right angle it is straight or zero degree. It is also a compact, low moving mass head, and all wiring and assist gas lines are internally located to eliminate potential operator downtime due to snags or breaks. See photograph attached hereto as **Ex. 4.** As shown by the photograph, the FiberCut brand is prominently displayed on the side of the processing head. Also, the FiberCut ST processing heads have demonstrated success in retrofit situations where they have replaced existing laser cutting heads that were costly and difficult to operate by end users.

14. The third FiberCut processing head is a smaller version of the FiberCut St that is commonly known as the FiberCut Mini or FiberMini ST and FiberMini RA. This smaller laser head is a simple, yet flexible design that allows Laser Mech to optimize the

processing head to the end user's laser. The head is capable of cutting a wide range of materials and is also available in various welding configurations.

15. In early 2011, Laser Mech was awarded a large, multiple-unit order for the FiberCut Zero Degree to replace an entire production line of laser processing heads at a major Tier 1 "end user" automotive facility. See Laser Mech May/June 2011 newsletter/press release attached hereto as **Ex. 5**.

16. In the early 2012, Laser Mech added an all-new FiberCut RAc to its family of FiberCut laser processing heads. The right angle processing head is nearly 30 percent smaller and lighter than the original FiberCut processing head for tighter access robotic cutting. See Laser Mech May/June 2012 newsletter/press release attached hereto as **Ex. 6**. See *also* photograph attached hereto as **Ex. 7**. As shown by the photographs, the FiberCut brand is prominently displayed on the side of the processing head.

V. Marketing and Promotion

A. Trade Shows

17. Laser Mech widely markets and promotes its FiberCut laser processing heads at trade shows throughout the United States and the world.

- In 2009, FiberCut laser processing heads were promoted at ICALEO in Orlando, Florida; Fabtech in Chicago, Illinois, and LASER World of PHOTONICS in Munich, Germany;
- In 2010, FiberCut laser processing heads were promoted at Fabtech in Atlanta, Georgia (see New Product Preview attached hereto as **Ex. 8**); Sheet Metal Welding Conference XIV in Michigan; LASER World of

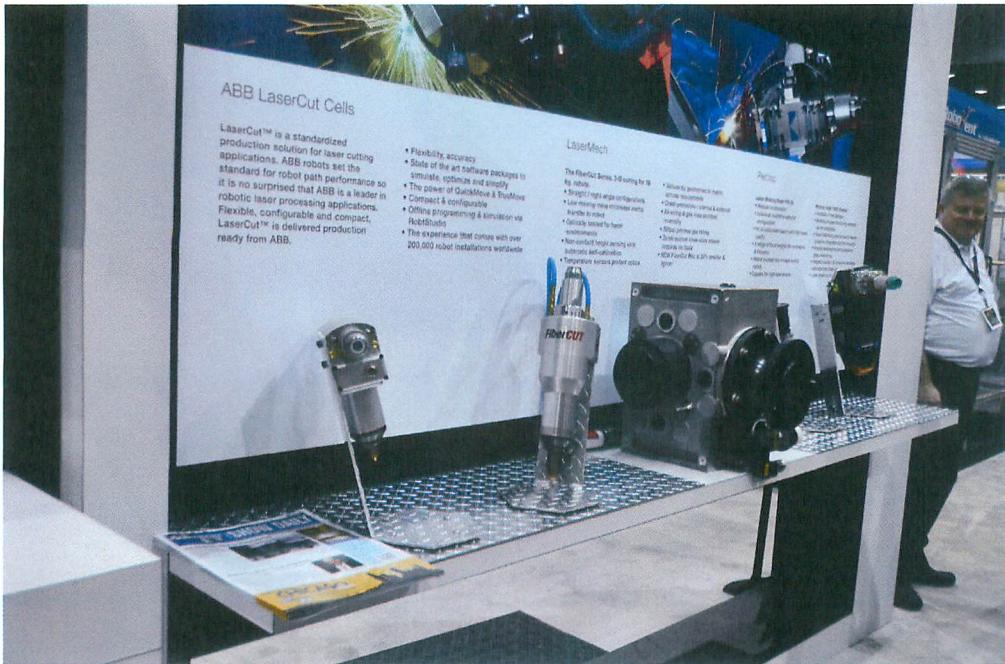
PHOTONICS in China; PICALO in China; LASYS in Germany, EuroBLECH in Germany; and Benelux Laser Event in Belgium.

- In 2011, FiberCut laser processing heads were promoted at the Symposium for Advanced Laser Application in Hartford, Connecticut; The Lasers for Manufacturing Event in Schaumburg, Illinois; ICALEO in Orlando, Florida; Fabtech in Chicago, Illinois; LASER World of PHOTONICS in China; MEDTEC Europe 2011; LASER World of PHOTONICS in Germany;
- In 2012, Fiber Cut laser processing heads were promoted at Fabtech in Las Vegas, Nevada (see New Product Preview attached as **Ex. 8**); MD&M West in Anaheim, California; The Lasers for Manufacturing Event in Schaumburg, Illinois; LASER World of PHOTONICS in China; LASYS in Germany; and EuroBLECH in Germany.
- In 2013, FiberCut laser processing heads were promoted at MD&M West in Anaheim, California, and are scheduled to be promoted at The Lasers for Manufacturing Event in Schaumburg, Illinois; ICALEO in Miami, Florida; Fabtech in Chicago, Illinois; and LASER World of PHOTONICS in China; LASER World of PHOTONICS in Germany.

18. Each of these tradeshows is widely attended by all types of customers from all over the world, including the United States. At any given tradeshow, actual FiberCut laser processing heads are on display, along with color brochures touting the various features of the FiberCut laser processing heads as shown in a photograph from the Laser Mech exhibit at the MD&M show attached at **Ex. 9**.

19. Also, FiberCut laser processing heads are requested and at times displayed by other exhibitors at these tradeshows to demonstrate the operations of their laser systems or laser solutions. In such instances, the borrowing attendee markets and promotes the FiberCut laser processing head. Thus, attendees at the tradeshows are able to observe Laser Mech's FiberCut laser processing heads within systems or as a part of solutions that are marketed and sold to end users by other suppliers. For example, FiberCut laser processing heads were displayed at the Fabtech trade show by ABB as part of their solutions as shown in the photographs below:





See also **Ex. 10** (photographs from 2010 Fabtech showing FiberCut laser processing heads on display with ABB systems). The FiberCut laser processing head was also displayed by Yaskawa Motoman, who displayed a Laser Mech FiberCut laser processing head along with their robotics. (See Yaskawa Motoman marketing materials at **Ex. 11**). Also, the FiberCut laser processing head was displayed at the International Manufacturing and Technology Show in September 2012 by Rofin-Sinar.

20. These exhibitors request to use FiberCut laser processing heads because FiberCut laser processing heads are highly respected in the laser industry. As a result, customers of laser processing systems and laser solutions have become well aware of Laser Mech's FiberCut laser processing heads.

21. Recently, Laser Mech agreed at the Fabtech tradeshow to allow a FiberCut laser processing head to be displayed by IPG as shown below:



Laser Mech permitted IPG to display the FiberCut processing head because IPG previously purchased the processing head for use in its cutting system. In the photograph, the Laser Mech FiberCut processing head is promoted separately but an actual FiberCut processing head is also shown within the IPG cutting system. To the right of the IPG cutting system shown in the center of the photograph is a second IPG cutting system, commonly referred to as a flatbed cutting system, that is not fully visible in the photograph, but which IPG has subsequently fitted with a FiberCut processing head as well. This IPG cutting system is similar to the one recently introduced by Vytek that improperly uses our FIBERCUT trademark. In each of these systems, including the flatbed cutting systems, the processing head is a predominant part of the laser cutting system.

B. Magazine Promotion

22. Laser Mech also promotes its FiberCut laser processing heads in various publications. The following are representative examples:

- The Fabricator, September 2009 (See **Ex. 12**)
- The Fabricator, October 2009 (See Ex. 12)
- The Fabricator, March 2010 (See Ex. 12)
- The Fabricator, August 2010 (See Ex. 12)
- The Fabricator, October 2010 (See Ex. 12)
- The Fabricator, August 2011 (See Ex. 12)
- The Fabricator, September 2012 (See Ex. 12)
- The Fabricator, October 2012 (See Ex. 12)

C. Magazine Advertising

23. Laser Mech also advertises its FiberCut laser processing heads in various publications. The following are representative examples:

- The Fabricator, August 2010 (See **Ex. 21**)
- Industrial Laser Solutions, May/June 2010 (See Ex. 21)
- The Fabricator, October 2010 (See Ex. 21)
- Industrial Laser Solutions, January/February 2011 (See Ex. 21)
- Industrial Laser Solutions, March/April 2011 (See Ex. 21)
- The Fabricator, December 2012 (See Ex. 21)
- The Fabricator, October 2012 (See Ex. 21)

In addition to the Laser Mech FiberCut promotion and advertising, publications such as The Fabricator heavily advertise cutting systems similar to those now improperly sold by Vytek under Laser Mech's FiberCut trademark. (See **Ex. 13**).

24. It is my understanding that The Fabricator serves manufacturing companies that fabricate ferrous and nonferrous metal products made from sheet metal and metal plate as well as miscellaneous fabricating processes. Also, The Fabricator is published by FMA Communications and is the official publication of The Fabricators & Manufacturers Association.

D. Internet

25. Laser Mech also advertises its FiberCut laser processing heads by way of Internet advertising, as well as at Laser Mech's Internet web site, which is located at <http://www.lasermech.com>.

26. Laser Mech's FiberCut laser processing heads are available for review at numerous Internet online addresses, including for example at <http://www.youtube.com/watch?v=cpTnWEA5L7Y>.

E. Marketing Expenses/Sales

27. To date, Laser Mech has spent close to \$500,000 in "hard costs" in promoting its FiberCut laser processing heads through advertising, tradeshows and literature. Laser Mech has invested significantly more by way of its own in-house employee marketing efforts as well as other internal costs.

28. The FiberCut laser processing heads have enjoyed enormous success and generated more than \$4M in sales.

VI. Third Party Publications

29. FiberCut laser processing heads have been featured by publications such as Manufacturing Engineering Magazine. Manufacturing Engineering Magazine is a premier source for news and in-depth technical information about manufacturing in North America.

30. Attached as **Ex. 14** is a copy of an article by Doug Hixon, a Robotic Laser Welding and Cutting Specialist at ABB Robotics, entitled Robotics Cut New Path in Hot Metal Stamping, dated June 2012. Hixon writes about the emerging trend of using lightweight, higher strength steels in newer vehicle designs and the ever increasing use of lasers to trim the edges and cut features into the steel, and includes a photograph of a Laser Mech FiberCut Zero Degree laser cutting head integrating with an ABB robot.

31. Attached as **Ex. 15** is an article that was published in the January February 2011 edition of eFab Shop Magazine in which beam delivery systems, including Laser Mech's FiberCut laser processing head, are featured.

32. Attached as **Ex. 16** is an article announcing the introduction of a new FiberCut laser processing head that was published in the July/August 2009 edition of LIA Today, which is the Official Newsletter of the Laser Institute of America.

VII. Customers

33. Today, in large part through the marketing efforts of Laser Mech, customers refer to the trademark FiberCut whenever they are referring to Laser Mech's FiberCut laser processing heads.

34. Laser Mech sells its FiberCut laser processing heads to customers located throughout the laser industry and throughout the United States. For example, Laser Mech sells its FiberCut laser processing heads to original equipment manufacturers who integrate the Laser Mech FiberCut processing heads into custom component laser delivery or non-custom component laser delivery systems such as the knock-off FiberCut laser system that Mr. Dirk Burrowes and Vytek recently started selling. Laser Mech also sells its FiberCut laser processing heads directly to end users who are purchasing the FiberCut laser processing heads for laser delivery systems that they design and build or that they purchase from suppliers of laser delivery systems such as Vytek. In fact, Laser Mech sells approximately 50% of its FiberCut laser processing heads to end users who purchase the laser processing heads to use in laser delivery systems that they have either designed and built or purchased from suppliers of laser delivery systems. The fact that the FiberCut laser processing head is highly visible in all solutions and systems is another reason customers have come to know the Laser Mech FiberCut brand as the source of Laser Mech's high quality laser processing heads.

VIII. The 2012 Fabtech Trade Show in Las Vegas

35. From November 12 through November 14, 2012, I personally attended the Fabtech tradeshow in Las Vegas. At the tradeshow, I observed Mr. Dirk Burrowes selling a new laser cutting system on behalf of his company Vinyl Technologies, Inc. (hereinafter "Vytek") under the FiberCut trademark. I was shocked and upset because Vytek was never authorized to use the FiberCut trademark in any way. Visually, the laser cutting system on display at the Vytek booth was the same as the FiberCut system

that Vytek is showing today on Vytek's Internet Web sites located at <http://www.vytek.com>. (See **Ex. 17**) and <http://www.fibercut.com>. (See **Ex. 18**)

36. I was well aware of Vytek prior to the Fabtech tradeshow because Vytek has been a Laser Mech customer for over 16 years. In fact, Vytek purchased a FiberCut laser processing head from Laser Mech in February 2012.

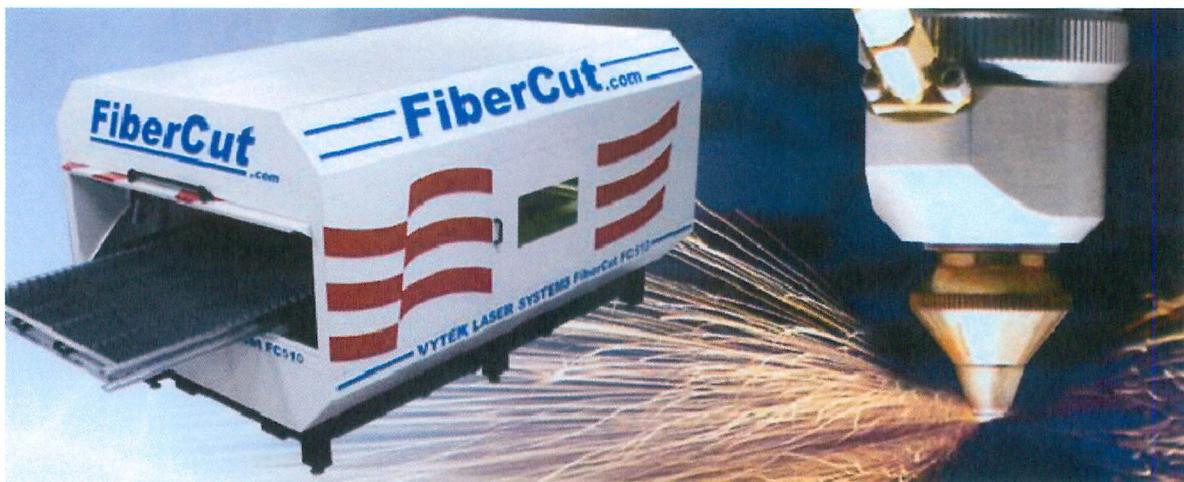
37. When I saw that Vytek was marketing and selling a laser system at the tradeshow under the FiberCut mark, I could not believe it. Vytek was marketing its laser system as if it were an extension of the FiberCut brand, which it is not.

38. I immediately told to Mr. Dick Burrowes on November 12 while at the tradeshow that he could not under any circumstances use the FiberCut mark to market his new laser system and told him to pick another name. Mr. Burrowes acknowledged at the tradeshow that he knew that Laser Mech was already using the FiberCut mark for its laser processing heads, but seemed to justify his use of the mark by the fact that he obtained the <http://www.fibercut.com> Internet domain name. I told him that it did not matter that he had secured the <http://www.fibercut.com> domain name address. He responded by asking if he might have a few days to think it over. I advised him that he needed to discontinue his use of the FiberCut mark.

39. In looking at the "so called" FiberCut system that was on display at the tradeshow, I was shocked to see that the print style selected by Vytek is very similar to the print style used by Laser Mech. Both print styles use an upper case "F" to start the mark followed by lower case "iber" and both use an upper case "C" to start Cut. Also, both print styles use a similar if not identical forward leaning lettering. They look the same.

40. I later learned that Mr. Burrowes while telling me he needed a few days to think over my instruction, and fully aware of my objection, used his time to file -- on November 14, 2012 -- the last day of the tradeshow, an application with the United States Patent and Trademark Office seeking to obtain a trademark registration for the mark FiberCut. It was incredulous to me that he would do such a thing.

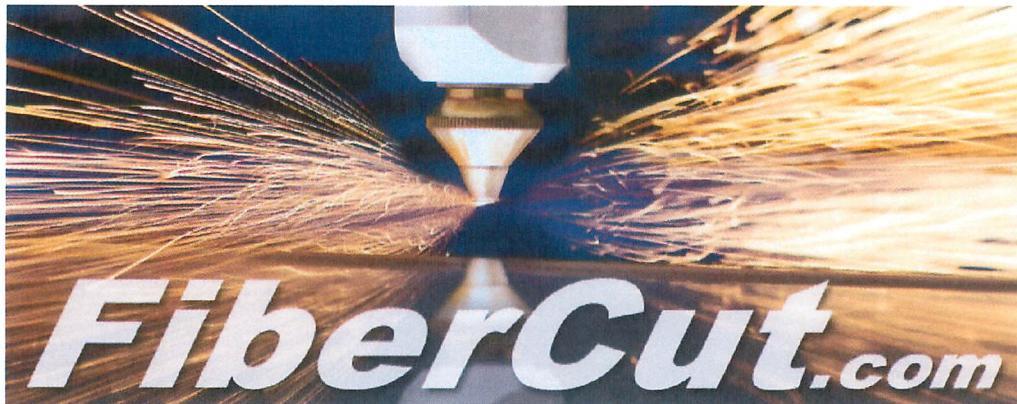
41. In looking further at the Vytek <http://www.vy-tek.com> Internet web site, the front page imagery deliberately trades on the goodwill developed by Laser Mech in that the FiberCut mark appears on Vytek's laser system directly next to a picture of Laser Mech's FiberCut laser processing head:



To be clear, the FiberCut mark appears directly next to a photograph of a Laser Mech FiberCut laser processing head. This is likely a photograph of the FiberCut laser processing head that Vytek purchased from Laser Mech in February 2012. Vytek never requested nor was it given permission to show a depiction of a FiberCut laser processing head in advertising its new laser system.

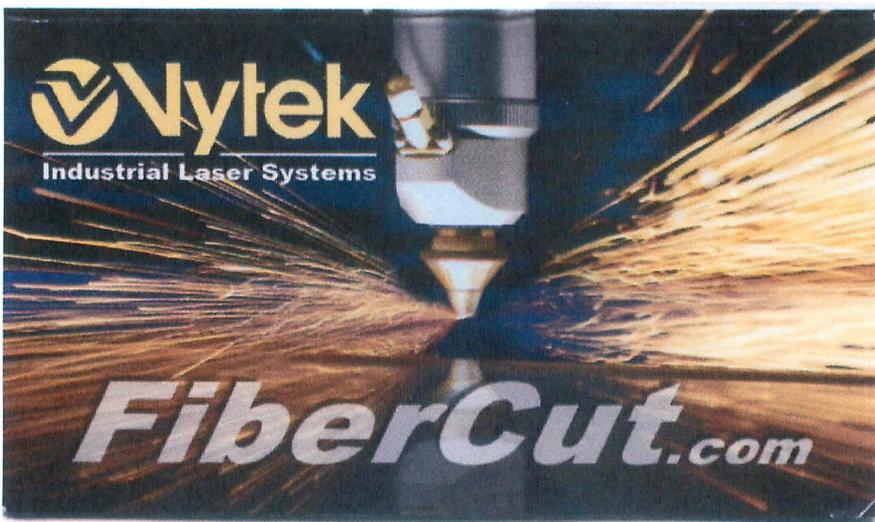
42. In looking at the <http://www.fibercut.com> Internet web site, the front page further trades of the goodwill developed by Laser Mech in its FiberCut mark by showing

the term FIBERCUT.com directly below a Laser Mech FiberCut laser processing head, as follows:



Again, Vytek never requested nor was it given permission to display an actual Laser Mech FiberCut laser processing head on its <http://www.fibercut.com> Internet web site.

43. Similar imagery appears on Vytek's business cards, which were distributed at the Fabtech tradeshow:



See **Ex. 19** (showing old and new Vytek business cards). Vytek's own product does not appear anywhere on the face of its business card.

44. I can think of no reason for Vytek to utilize the FiberCut mark or images of an actual Laser Mech FiberCut laser processing head in this way except to trade on the valuable goodwill of Laser Mech's FiberCut trademark and laser processing heads.

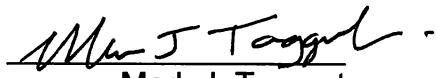
45. Unfortunately, Vytek's conduct has already caused confusion. Several attendees at the Fabtech trade show remarked that they thought Vytek was now authorized by Laser Mech to sell its laser system, or that Laser Mech was actually endorsing Vytek's laser system, which it is not.

46. If Vytek is permitted to keep using the FiberCut mark in this way, Laser Mech will have no choice but to change the name of its processing heads as Laser Mech cannot control its reputation (and prevent damage to its reputation, if Vytek is allowed to continue using the same mark).

47. I do not believe that Vytek has actually sold any system yet because its introduction is so new, despite being marketed at the tradeshow and online and through email campaigns. See **Ex. 20**

I declare under penalty of perjury of the laws of the United States that the foregoing is true and correct.

Executed this 8th of March 2013


Mark J. Taggart